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Conference Abstract

Species Threat Assessment Tool and Online Result Service in FinBIF

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Abstract

The threat assessment of Finnish species was carried out during 2017–2018 for the third time using International Union for Conservation of Nature (IUCN) criteria (IUCN 2012a, IUCN 2012b, IUCN 2016). The Red List was published in March 2019 (Hyvärinen et al. 2019). In conjunction with the assessment of threatened species, 36,602 species or lower taxa were listed. The information was sufficient for assessment of 22,418 species. It was done by 18 expert groups of different organism groups. The process was coordinated by the Finnish Environment Institute Syke and led by the steering group of the assessment from the Ministry of Environment. For the first time, the Finnish Biodiversity Information Facility FinBIF offered a documentation tool and archive for the threat assessment. The assessment was based on the national checklist of Finnish species coordinated by FinBIF. Many of the expert groups are in active collaboration with FinBIF in maintaining FinBIF's taxon database and in updating the checklists. Hence, there was a good foundation to build on in developing the cooperation further and deepening the integration of the Red Listing process into FinBIF's IT infrastructure.

The documentation tool of the assessment is implemented in the taxon database of FinBIF (Fig. 1). The Red List data of the 2010 (all species) and 2015 (birds and mammals) assessments are readily available in the tool. The assessor can therefore easily copy and

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confirm e.g. area of occupancy, extent of occurrence, generation length and habitat of a species, if there is no need for editing. The service offers the possibility to add notes to most of the fields separately and commenting on the assessment by other authorized users. The tool archives the history of all changes. In line with the IUCN instructions, the tool automatically chooses the criteria leading to the highest possible threat category of criteria A-E filled out for each species. However, the assessor confirms the final evaluation. Finally, in several fields, the tool automatically checks the validity of values entered, e.g. criteria, threat category, length of the observation period, causes of threat, and current threat factors. The tool includes necessary fields for back-casting the categories of previous assessments to count the Red List Index. There is also a possibility to add or choose references for the assessment of a certain species in the publications part of the taxon database. Due to linkage through the taxon database, the updated threat categories of each Finnish species are immediately available as additional information of each species introduced in FinBIF.

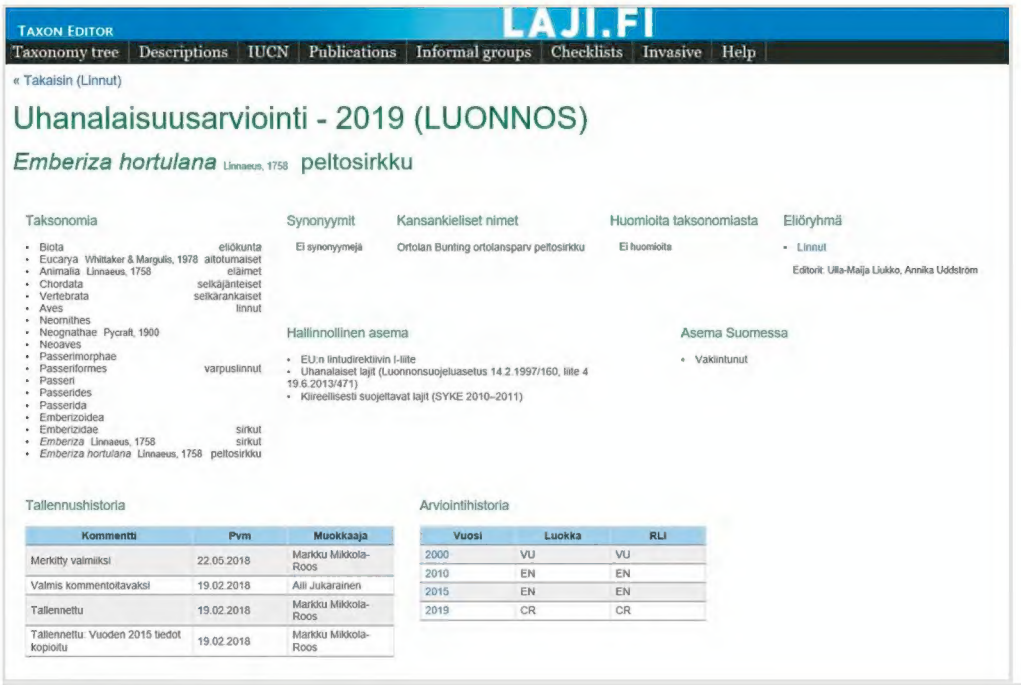

Figure 1.

Overview of the Ortolan Bunting threat assessment in the species threat assessment tool implemented in the FinBIF taxon database.

Also for the first time, the results of the threat assessment can be examined online directly after its publication at the Red List online service through FinBIF: https://punainenkirja.laji.fi/en. The online service makes Red List categories and related criteria searchable. Data can be categorized also by habitat, causes of threat, or current threat factors. Due to the ability to conduct searches, the online service supplements the printed book (Hyvärinen et al. 2019), which includes extensive summaries for groups of organisms.

Keywords

FinBIF, IUCN, Red List, species, threat assessment

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